

NARESHKUMAAR .T Metallurgist | PSG Tech nareshkumaar93@live.com +918012470843

### **Summary:**

- Metallurgist with 6+ years of working experience, specializing in materials like Carbon steel, alloy steel, and Aluminium, Copper and its alloys
- Expertise in Heat treatment processes of Steel, Resistance welding of copper and its alloys
- Expertise in Metallurgical analysis, Failure Analysis, Quality Audits
- Exposure to International Materials Standards
- Exposure to IATF standard and working relationship with global Auto component & OEMs

# **Experience:**

Organization	Department	Designation	Responsibilities
LUCAS – TVS Ltd , Chennai (May'17 ~ Present)	Engineering center	Engineer – Metallurgy	<ul> <li>Material &amp; Process development - NPD</li> <li>Technical specification release</li> <li>VA/VE</li> <li>Process Establishment &amp; Improvement</li> <li>Metallurgical analysis</li> <li>Failure Analysis</li> <li>Bench marking</li> <li>Metallurgical Lab Maintenance</li> </ul>
LG Balakrishnan & Bros Ltd (ROLON) (Feb'15 to May'17)	R&D Division	Engineer – Metallurgy	<ul> <li>Material &amp; Process development - NPD</li> <li>Material Testing</li> <li>Bench marking</li> <li>Failure Analysis</li> <li>Lead – Calibration &amp; AMC</li> <li>Metallurgical Lab Maintenance</li> </ul>
Craftsman Automation Pvt Ltd (Jun'14 – Feb'15)	Aluminium Foundry	Graduate Engineer Trainee	<ul> <li>Microstructure Analysis of Aluminium, Sand Analysis, Mechanical Testing, Chemical Composition Analysis,</li> <li>Metallurgical Lab Maintenance</li> </ul>

# **Technical Exposure**

### New Product Development(NPD):

- Organizing Heat treatment & Welding feasibility reviews
- Recommending suitable Materials to meet the desired properties to design team
- Technical assistance to the NPD team (Material, Process)
- Recommending suitable process cycles to meet the desired properties to design team
- Establishing new development process in Heat treatment and welding
- Vendor development

#### > Heat Treatment:

- Expertise in processes and validation of Case Hardening, Surface Treatment (Nitriding) & Induction Hardening
- Exposure to major heat treating furnaces like SQF (Sealed Quench Furnace), CMBF (Continuous Mesh Belt Furnace), Rotary Furnace, Tempering Muffle or Oven & Induction Hardening machine
- Exposure to T6 heat treatment process for aluminium

#### **➤** Welding:

- Exposure to Resistance welding, TIG welding, Capacitor discharge welding, Brazing
- Exposure to welding of Copper and steel

#### Metal Casting:

- Working experience in sand and die casting of aluminium
- Working exposure in High Pressure Die Casting (HPDC) & Low Pressure Die Casting (LPDC)
- Working exposure of melting of aluminium

#### Metallurgical Analysis:

- Expertise in Raw material analysis, Material property Testing: Chemical composition analysis, Tenslie strength analysis, Breaking load analysis, Hardness testing, Compression strength test
- Expertise in Microstructure analysis of Steel and Aluminium

#### > Instruments Skills:

- Hardness Testing Machines like Rockwell, Brinell, Vickers & Micro Vickers
- Metallurgical Microscope and Stereoscope (Leica)
- Optical emission spectroscopy (ARL3460 & Spectromax)
- Carbon Sulphur analyser (Horiba), X –RAY Fluorescent spectroscopy (Thermo fisher)
- UTM, Tensometer (Tensile strength, Crushing strength, Breaking load analysis)

#### > Failure Analysis:

- FMEA in Process front, Field failure analysis & corrective action
- Exposure with 7QC tools

# **Academics:**

Course	Institution	Year	Marks
B.E (Metallurgy)	PSG College of Technology, Coimbatore – 641004	2014	7.04
Higher Secondary	Saratha Higher Secondary School, Gobichettipalayam – 638476	2010	89 %
Secondary	Saratha Higher Secondary School, Gobichettipalayam – 638476	2008	94 %

# **Achievements:**

- ➤ Lead profitability improvement programs for cost savings worth Rs.25L
- > Implemented Austempering process in Brush spring (starter motor) for Korean OEM

## **Other Interests:**

Basketball, Photography, Music

### **Curriculum vitae:**

Name	T.NARESHKUMAAR	
Father's Name	M.THIRUNAVUKARASU	
Mother's Name	D.ARUL SELVI	
Date of Birth	17-Jul-1993	

I hereby declare that all the particulars furnished above are true to the best of my knowledge

Place: CHENNAI T.NARESHKUMAAR